

BOARD OF ENVIRONMENTAL REVIEW
AGENDA ITEM
EXECUTIVE SUMMARY FOR INITIATING RULEMAKING

AGENDA # II.B.1

ITEM SUMMARY

The department requests that the Board approve its proposal to initiate rulemaking to amend the human health standards for arsenic and Total Trihalomethane in Department Circular WQB-7 and amend the rules where WQB-7 is incorporated by reference to reflect the correct version date.

LIST OF AFFECTED RULES

ARM 17.30.502, 17.30.619, 17.30.702, 17.30.715, 17.30.1001, 17.30.1006 and 17.30.1007 and Department Circular WQB-7.

AFFECTED PARTIES SUMMARY

The parties that may be affected by adopting the proposed more stringent human health standards for arsenic and total trihalomethane are those with MPDES permits, those who are about to renew a MPDES permit or those who will need a new permit. Effluent limits and monitoring requirements are included in a MPDES permit when there is a reasonable expectation that water quality standards could be violated for these parameters. There are presently 34 permits that require monitoring or have limits for arsenic. There are no permits that require monitoring or have limits for total trihalomethane.

SCOPE OF PROPOSED PROCEEDING

The Department requests that the Board initiate rulemaking to amend Department Circular WQB-7 human health standard for arsenic to 10µg/L and the health standard for total trihalomethane to 80µg/L, to amend the rules that incorporate by WQB-7 by reference, and assign a hearing officer to preside over a public hearing.

BACKGROUND

Arsenic

The EPA has been re-evaluating the Maximum Contaminate Level (MCL) for arsenic for several years. And promulgated a new MCL for arsenic of 10µg/L in January 2001. The Maximum Contaminate Level Goal (MCLG) for arsenic is zero.

The MCLG is not enforceable but indicates the desired level of a parameter and for carcinogens the goal of zero reflects the assumption that carcinogens do not have a threshold level that does not result in an increased risk of cancer.

When the EPA published the new MCL of 10 µg/L for arsenic the effective date for compliance purposes by community water systems and non-transient, non-community waster systems was delayed to January 2006. The delay is to allow these systems to design and implement the changes necessary to meet the new MCL.

The Department has consulted with the EPA regarding the effective date of the MCL considering the delay for compliance purposes. The EPA clarified that the 10µg/L MCL is in effect.

The Montana Water Quality Act directs the Board to adopt standards for arsenic (a carcinogen) at an excess lifetime cancer risk level of 1/1,000 unless that value violates the MCL obtained from 40CFR, part 141, in which case, the MCL must be adopted as the standard. Because of this requirement the Department is requesting the Board to initiate rulemaking to amend WQB-7 and adopt the MCL of 10µg/L as the human health standard in surface and ground water.

Arsenic occurs naturally in waters throughout the state at a wide range of concentrations. The available data indicates that the Madison River has the highest concentrations of arsenic. Values sometimes exceed 300µg/L. The major source of arsenic in the Madison River is the geothermal springs common in its Yellowstone National Park headwaters. Dilution lowers the concentration of arsenic in the upper Missouri River to about 20 µg/L. Measurable levels of arsenic less than 10µg/L are common throughout Montana. Waters that naturally exceed the proposed 10µg/L standards are not subject to increased regulation because of the proposed changes.

Total Trihalomethane

The EPA has promulgated a new MCL for total trihalomethane (TTHM) of 80µg/L in December 1998, which is now partially in effect for Public Water Supplies. Trihalomethane is made up of Chloroform, Bromodichloromethane, Dibromochloromethane and Bromoform. There is no Maximum Contaminate Level Goal (MCLG) for total trihalomethane.

The MCLG is not enforceable but indicates the desired level of a parameter and for carcinogens the goal of zero reflects the assumption that carcinogens do not have a threshold level that does not result in an increased risk of cancer.

When the EPA published the new MCL of 80 µg/L for TTHM it delayed the effective date for compliance purposes by community water systems and non-transient, non-community water systems based on size of the served population. The delay is to allow these systems to design and implement the changes necessary to meet the new MCL with more time given to the small systems.

The Department has consulted with the EPA regarding the effective date of the MCL considering the delay for compliance purposes. The EPA clarified that the 80µg/L MCL is in effect.

The Montana Water Quality Act directs the Board to adopt standards for carcinogens at an excess lifetime cancer risk level of 1/1,000,000 unless that value violates the MCL obtained from 40CFR, part 141, in which case, the MCL must be adopted as the standard. Because of this requirement the Department is requesting the Board to initiate rulemaking to amend WQB-7 and adopt the MCL of 80µg/L as the human health standard Total Trihalomethane in surface and ground water.

Trihalomethanes are formed when chlorine reacts with organic matter in the water. The disinfection of raw drinking water and effluent from wastewater treatment facilities are primary ¹sources of total trihalomethane.

Because of the rule change proposed to WQB-7 modifications to Title 30 Chapter 17 subchapters 5, 6, 7 and 10 are needed to reflect the newest edition (June 2003) of the circular.

HEARING INFORMATION

The Department requests that the Board appoint a hearing officer to conduct a public hearing on 18 March 2003 with the close of public comment on 21 March 2003.

BOARD OPTIONS

The Board may:

1. Authorize the Department to initiate rulemaking and issue the attached Notice of

Proposed Amendment of Rules,

2. Modify the Notice of Proposed Amendment of Rules and initiate rulemaking thereafter;
- or
3. Deny the Department's request that it initiate rulemaking.

DEQ RECOMMENDATION

The Department recommends that the Board grant the Department's request to initiate rulemaking and schedule a hearing.

ENCLOSURES

The following information is attached to this summary:

- 1) Draft Notice of Public Hearing on Proposed Adoption and Amendment.
 - 2) Draft cover page and pages of WQB-7 with arsenic and total trihalomethane proposed amendments.
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